Based Upon: PCT/EP2003/006090

## AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A printing device with an electro-photographic print unit (30)[[,]] to which a transfer medium (34) for transferring a toner powder to a substrate (13) in a transfer zone is assigned, wherein the substrate (13) can be conducted through the transfer zone by ~~means of~~ a transport system (10), wherein heat energy can be introduced into the substrate (13) by ~~means of~~ at least one ~~or several~~ heating ~~elements~~ element (24), ~~wherein~~ and a cooling device (35) is assigned to the transfer medium (34)[[,]] which removes heat from the ~~latter, characterized in that~~ transfer medium (34), the printing device comprising:

at [[the]] a transfer zone formed with the substrate (13)[[,]] the transfer medium (34) having [[has]] a lower temperature[[,]] at least in [[the]] an area of the contact face[[,]] than [[the]] at a surface of the substrate (13).

2. (Currently Amended) The printing device in accordance with claim 1, wherein ~~characterized in that~~ the cooling device (35) cools ~~the temperature of~~ the transfer medium (34) to a temperature ≤ 60°C.

3. (Currently Amended) The printing device in accordance with claim [[1 or]] 2, wherein ~~characterized in that~~ the cooling device (35) cools ~~the temperature of~~ the transfer medium (34) to a temperature ≤ 40°C.

4. (Currently Amended) The printing device in accordance with ~~one of claims 1 to~~ claim 3, wherein ~~characterized in that~~ the toner transfer in the transfer zone ~~can be~~ is affected by ~~means of~~ at least one ~~or several coronas~~ corona (12).

5. (Currently Amended) The printing device in accordance with ~~one of claims 1 to~~ claim 4, wherein ~~characterized in that~~ the substrate (13) is placed on an electrically conductive base[[,]] and [[in]] with respect to [[the]] a charge of the toner[[,]] the base is charged with [[the]] a reverse polarity ~~sign~~.

6. (Currently Amended) The printing device in accordance with ~~one of claims 1 to~~ claim 5, wherein ~~characterized in that~~ the substrate (13) is moved ~~past~~ beyond the transfer medium (34) synchronously [[in]] with respect to

[[the]] a circumferential speed of the transfer medium (34) by ~~means of~~ a transport system (10), and a charge with [[the]] an opposite polarity ~~sign of the~~ relative to a second charge of the toner is applied to the transfer medium (34) in the transport system (10).

7. (Currently Amended) The printing device in accordance with ~~one of claims 1 to~~ claim 6, wherein ~~characterized in that~~ on [[its]] a surface which receives the toner powder[[,]] the transfer medium (34) ~~is provided with~~ has an anti-adhesive layer (34.3), and ~~this~~ the anti-adhesive layer (34.3) has a surface energy within [[the]] a range of 15 mN/m to 30 mN/m.

8. (Currently Amended) The printing device in accordance with ~~one of claims 1 to~~ claim 7, wherein ~~characterized in that~~ the substrate (13) ~~can be charged~~ is chargeable with heat energy by ~~means of~~ at least one ~~or several a~~ heating ~~elements~~ element designed as at least one of an infrared ~~radiators and/or~~ radiator and a hot air ~~blowers and/or~~ blower by ~~means of the~~ an application of a flame.

9. (Currently Amended) The printing device in accordance with ~~one of claims 1 to~~ claim 8, wherein ~~characterized in that~~ the ~~substrates~~ substrate (13) to be imprinted [[are]] is heated to [[the]] a required temperature in an upstream-located temperature process~~, for example in a continuous throughput oven with ambient air heaters~~.

10. (Currently Amended) The printing device in accordance with ~~one of claims 1 to~~ claim 9, wherein ~~characterized in that~~ the heating element (24) heats [[the]] a surface of the substrate (13) to a surface temperature range between 80°C and 200°C[[,]] at least in certain areas of the surface.

11. (Currently Amended) The printing device in accordance claim 10, wherein ~~characterized in that~~ the surface temperature of the substrate (13) is 100°C to 170°C[[,]] at least in certain areas.

12. (Currently Amended) The printing device in accordance with ~~one of claims 1 to~~ claim 9, wherein ~~characterized in that~~ a temperature sensor (21) is assigned to the substrate (13)[[,]] and at least one of the heating element (24)

~~and/or~~ and the transport system (10) ~~can be~~ is controlled by ~~means of~~ a control device (23) as a function of the signal emitted by the temperature sensor (21).

13. (Currently Amended) The printing device in accordance with ~~one of claims 1 to~~ claim 12, wherein ~~characterized in that several~~ a plurality of the temperature sensors (21) are arranged over [[the]] an entire print width[[,]] and a heating element (24) is assigned to each of the temperature sensors (21), and [[the]] a heating output ~~can be~~ is separately controlled within zones over [[the]] a print width.

14. (Currently Amended) The printing device in accordance with claim 13, wherein ~~characterized in that~~ the temperature ~~sensor~~ sensors (21) each is a pyrometer.

15. (Currently Amended) The printing device in accordance with ~~one of claims 1 to~~ claim 14, wherein ~~characterized in that~~ at least one ~~or several~~ liquid-cooled contact ~~rollers~~ roller of the cooling device (35) ~~roll~~ at least one of rolls off on the transfer medium (34)~~, and/or~~ and a climate-controlled air flow is directed onto the surface of the transfer medium.

16. (Currently Amended) The printing device in accordance with ~~one of claims 1 to~~ claim 15, wherein ~~characterized in that~~ the transfer medium (34) is ~~embodied as~~ one of a transfer roller [[or]] and a transfer belt[[,]] which contains at least a portion of the cooling device [[(34)]] (35).

17. (Currently Amended) The printing device in accordance with claim 16, wherein ~~characterized in that~~ the transform medium (34) ~~embodied as~~ is a transfer roller and has interior air cooling.

18. (Currently Amended) The printing device in accordance with ~~one of claims 1 to~~ claim 17, wherein ~~characterized in that~~ the cooling device (35) removes heat energy from the transfer medium (34) downstream of the transfer zone and upstream of the photoconductor (32) of the print unit (30) in [[the]] a transport direction of the transfer medium (34).

19. (New) The printing device in accordance with claim 1, wherein the cooling device (35) cools the transfer medium (34) to a temperature $\leq 40°C$.

20. (New) The printing device in accordance with claim 1, wherein the toner transfer in the transfer zone is affected by at least one corona (12).

21. (New) The printing device in accordance with claim 1, wherein the substrate (13) is placed on an electrically conductive base and with respect to a charge of the toner the base is charged with a reverse polarity.

22. (New) The printing device in accordance with claim 1, wherein the substrate (13) is moved beyond the transfer medium (34) synchronously with respect to a circumferential speed of the transfer medium (34) by a transport system (10), and a charge with an opposite polarity relative to a second charge of the toner is applied to the transfer medium (34) in the transport system (10).

23. (New) The printing device in accordance with claim 1, wherein on a surface which receives the toner powder the transfer medium (34) has an anti-adhesive layer (34.3), and the anti-adhesive layer (34.3) has a surface energy within a range of 15 mN/m to 30 mN/m.

24. (New) The printing device in accordance with claim 1, wherein the substrate (13) is chargeable with heat energy by at least one heating element designed as at least one of an infrared radiator and a hot air blower, and a blower by an application of a flame.

25. (New) The printing device in accordance with claim 1, wherein the substrate (13) to be imprinted is heated to a required temperature in an upstream-located temperature process.

26. (New) The printing device in accordance with claim 1, wherein the heating element (24) heats a surface of the substrate (13) to a surface temperature range between 80°C and 200°C at least in certain areas of the surface.

27. (New) The printing device in accordance with claim 1, wherein a temperature sensor (21) is assigned to the substrate (13) and at least one of the heating element (24) and the transport system (10) is controlled by a control device (23) as a function of the signal emitted by the temperature sensor (21).

28. (New) The printing device in accordance with claim 1, wherein a plurality of the temperature sensors (21) are arranged over an entire print width and a heating element (24) is assigned to each of the temperature sensors (21), and a heating output is separately controlled within zones over a print width.

29. (New) The printing device in accordance with claim 1, wherein temperature sensors (21) arranged over an entire print width each is a pyrometer.

30. (New) The printing device in accordance with claim 1, wherein at least one liquid-cooled contact roller of the cooling device (35) at least one of rolls off on the transfer medium (34) and a climate-controlled air flow is directed onto the surface of the transfer medium.

31. (New) The printing device in accordance with claim 1, wherein the transfer medium (34) is one of a transfer roller and a transfer belt which contains at least a portion of the cooling device (35).

32. (New) The printing device in accordance with claim 1, wherein the cooling device (35) removes heat energy from the transfer medium (34) downstream of the transfer zone and upstream of the photoconductor (32) of the print unit (30) in a transport direction of the transfer medium (34).